

# Liftslide Install

## IN 8 STEPS

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### 1: OVERVIEW

#### Important To Know

Liftslides require a lot of care. Be considerate when handling the door components and treat them like fine furniture. Also, it's important to be exact with all measurements. The quality of the door's operation hinges on the precision of the installation and keeping the components in pristine condition. Tight tolerances also keep the system weather resistant.

#### **Delivery & Arrival**

Liftslide systems are delivered on a Weiland truck or by common carrier. With a common carrier the system components are crated. Panels are crated separate from the head track, side jambs, and bottom track. All components are securely wrapped and protected during shipment.

**IMPORTANT:** Unwrap and inspect all components for damage or for missing parts. If there is damage, take pictures and write comments on the carrier's paperwork before they leave the jobsite and please let your dealer know immediately.

Contact Customer Service at 760.722.8828 with questions.

## 2: SETTING UP

#### **Unpack & Organize**

The components for a Liftslide system are custom made. Please show concern for their safety and wellbeing. It's not easy to replace them! Place the component bundles near the rough opening so they don't get moved unnecessarily. The approved shop drawings and the tools listed on the next page should be on site.

#### Make sure that:

• The dimensions of the rough opening are the same as in the approved shop drawings. In the event that

the opening is larger than the approved drawings, fur the opening to the approved rough opening dimensions, making sure that the furring is firmly attached with nails, screws or strapping. If the rough opening is smaller, correct to the approved rough opening dimensions. It is important to maintain the ½" shim space for jacking screws.

- The structure above the header line is fully loaded with building materials.
- The mounting surface of the header has satisfactory support. Any sagging or deflection must not exceed 1/8" over the entire opening.
- The side jamb mounting surfaces have satisfactory support for the supplied materials.
- All surfaces in the opening are level, square, and plumb.
- The appropriate sill pans and window/door flashing are installed per local building codes and your weather exposure levels prior to installation.
- The depression width and depth should allow for the track width and depth listed on your approved drawings plus waterproofing, 1" shim space on the interior side, and ½" shim space at both ends of the track. The depression floor needs to be completely flat.

Please see below for a partial list of tools and supplies needed to complete the installation.

#### **Tools & Supplies**

- Approved drawings
- Lasers (360 degree, self-leveling 5 point)
- Transit Level
- 6' or 8' level
- Masons string
- Rotary hammer with 3/16", 34" concrete bits
- Injectable Epoxy adhesive (suggested cure time 1 hour)
- · Cleaning brush
- Epoxy gun
- 1/4"-20 all thread cut to 4" lengths
- 1/4"-20 nuts

- 1/4"-20 "nyloc" nuts
- 1/4" washers
- · Screw gun and tips
- · Chisel
- 6mm Allen "T" wrench or similar
- · Socket set with extensions
- · Drill bit set for wood
- · Variety of horse shoe shims
- Glass suction cups
- Ladders
- Shop Vac
- · Caulking Gun
- 7/8" Backer rod
- Polyurethane Caulking
- 1/2" inside diameter tubing for bottom track to site drainage
- The required installation fasteners per your jobsite condition

**NOTE:** Due to varied installation techniques, Weiland Sliding Doors does not provide actual installation hardware. The hardware required depends on your particular construction substrate.

#### **Screws & Fasteners**

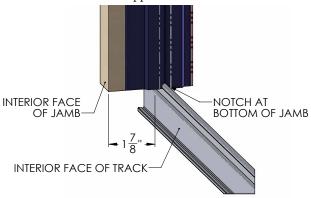
Jacking screws are used to adjust the position of the jambs and come pre-installed. The head and jambs are pre-drilled and countersunk for #10 flat-head screws. Use of stainless steel screws for exposed locations is highly recommended, but since stainless steel screws are very soft it will be necessary to drill pilot holes.

#### Layout

Determine how your system will finish out in the opening in relation to flooring, architectural features, wall finish material etc. Always keep the approved shop drawings on hand for reference.

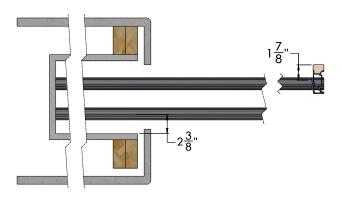
- Locate the high spot on the slab near the liftslide opening and use it as the starting point for the entire installation. The flooring contractor will use this same location to start the flooring installation.
- Determine the elevation of the finished floor from the high spot on the slab/subfloor taking into account the floating of the flooring material. Mark the finished floor elevation somewhere near the system opening for future reference.
- The elevation of the finished floor determines the elevation of the bottom track and the elevation of the bottom track determines all other door system measurements. The bottom track has a horizontal scribe line 3/16" down from the top of the track blade. This is where the finished floor and any grout lines must finish out in order for the door system to seal and function properly. The finish floor should be exterior rated, flat, smooth, level, non-porous, with no bumps or rises, without exposed aggregate, non-shrinking, non-expanding, and provide a continuous level pane under the door panels.
- On jamb-jamb and pocket-pocket units, find the center of the rough opening width and make a centerline mark on the subfloor and header. This mark can be used in reference to the center of the bottom track and top track. (Note that for Jamb-Pocket units this technique does not apply and you must center the unit from the pocket interlock location.)
- On jamb units, depth wise determine where the jambs will finish out in the opening in relation to wall finish material (drywall, stucco, casing, trim, etc.) On pocket units utilize the pocket interlock for positioning. Mark the opening somewhere near the bottom plate and trimmer showing where the inside face of the jamb finishes out.
- Once you know where the jambs will be set, you will be able to determine where the bottom track will sit. There is a notch at the bottom of the jamb that allows the jamb to seat onto the bottom track blade. This notch will give you an idea how the track and jamb align.
- Mark the face of track blade location in the depression. From this mark you will need to measure inward and make a reference mark on top of the slab. Apply these same measurements at the other end of the opening and snap a reference line across the opening connecting your reference marks. This reference line will allow you to keep your track straight and at the perfect location as long as you keep the same measurement from face of

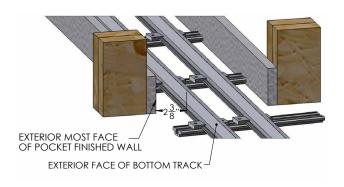
track blade to the snapped line.



**NOTE:** On a system with jambs, if the jambs are set to the exterior of the structure, the cross members (bridges) on the bottom track could extend past edge of the slab. This is acceptable, but the bridges may need to be cut and the mounting locations may change.

• If the system has a pocket(s), the distance from the face of the exterior most track blade to the finished inside of the exterior pocket wall should be 2-3/8".





## 3: BOTTOM TRACK

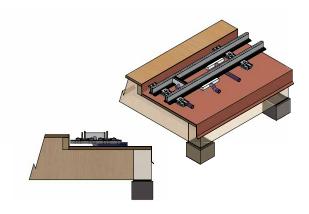
The bottom track comes assembled as a single unit, unless the overall system length exceeds 25 feet. If it exceeds 25 feet, the bottom track is split into two pieces, with a saddle to join them on-site during track installation. You will need to connect all drains with 1/2" i.d. drain tubing to your outside weep or drainage and should be sloped a minimum of 1/8" per foot. The tubing is available at hardware stores.

On the track, each cross member (or bridge) has been slotted to accept ¼" round hardware (not provided). This may include all-thread, hanger bolts, sleeve anchors, wood screws and/or anchor bolts.

**NOTE:** The steps below are for 1/4"-20 x 4" all thread rods embedded into epoxy, set in concrete. Other substrates will require different hardware and installation methods.

#### Positioning the Track

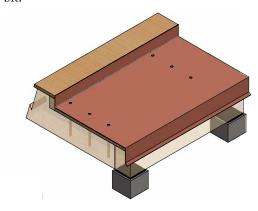
Find the center width of your bottom track and mark a centerline on the track with pencil or a <u>non-permanent</u> marker. Set the track in the opening and align the centerline mark that you previously marked on the subfloor and track using a framing square or similar tool. Position the track using the snapped reference line on the slab. Verify that the track is set at a consistent measurement all the way along the snapped line.



**NOTE:** For jamb-pocket units the system will need to be centered off of the pocket interlock location. Slab centerlines do not apply.

Now your track should be in the correct location width wise (height will be set later). Ensure that the track does not move from this location. Using a rotary hammer with a 3/16" masonry bit, drill pilot holes in the slab at all the mounting holes locations approx. 1" deep. Again, these holes are for ¼" all threads, you can use other fasteners that may require different installation methods.

Remove the track from depression and enlarge the 3/16" holes in slab to ¾" using a rotary hammer and ¾" masonry bit.



After the holes are drilled clean out the dust and debris with a shop vacuum, brush, and compressor.

#### Preparing the Track

Insert the ¼"-20 x 4" all thread studs through the bridges in the track and secure them using a "nyloc nut" and washer on the bottom of the bridge and a regular nut/ washer on top of the bridge. Preset the threaded rods so the track will end up close to the finished height. Tighten the nuts finger tight to square the bolts with the bridge. The nuts will be used to adjust the track to the final height.



#### Setting the track

When all the stud/nut assemblies are in place re-install the track into the depression and verify that the studs and holes align. If the alignment is off, make any necessary adjustments. Remove track and set aside.

You will need to move quickly on the next few steps so the epoxy doesn't harden before your track is set and fully aligned.

Using an epoxy that will give you about 1 hour work time before it sets, fill each hole, giving yourself enough time so that you can re-insert the track before the epoxy gels or sets.

Penetrations through the pan will need to be sealed with appropriate sealant prior to backfilling the depression.

Re-install the track into the depression. Verify that the studs are fully set into the holes. Confirm that the centerline on the track and slab are aligned. Align the track to the snapped reference line all the way along the track blade. You can pull a string along a blade of the track to double check straightness.

After verifying set time and assuring that the epoxy has fully set. Remove the nuts and washers from the top of the track. Set the track aside.

Using a transit set all of the bottom nuts to their exact height ensuring that the scribe line on the track will end up at the exact finished floor elevation. To figure the elevation of the bottom nut you will need to subtract the overall finished floor thickness from 1-13/16" (1-13/16" is the track height, from bottom of bridge to scribe line). The difference will be the distance downward from the high spot on the slab to the top of your nut. You will need to factor in your washer thickness. (Washer thicknesses may vary)

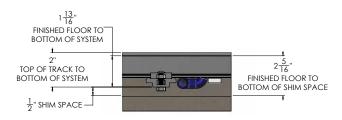
An **example** with washer thickness and overall finished floor is written below.

1-13/16" minus 34" (finished floor thickness) = 1-1/16" plus 1/16" (washer thickness) = 1-1/8" (distance from high spot on slab downward to the top of bottom nut)

**NOTE:** This is an example only! Your floor thickness, washer thickness, jobsite conditions, etc. may vary. You will need to verify all your dimensions and make sure that your specific systems are set to your unique jobsite conditions.

This is the basis for the entire system, so take your time and be sure it is exactly right. Within 1/32" is not close enough!

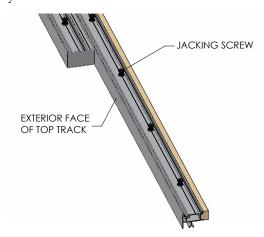
Once the bottom nuts have been adjusted to the correct height, reinstall the track with the top nuts and washers. Verify that the track is at the correct height and location before moving on to the next step.



Remove any remaining threaded rods above the top nut using a grinder or similar. After installation, create a restricted zone around the track area so that it doesn't get damaged or moved while you wait on fill-in material.

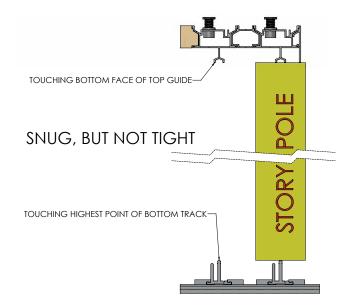
## 4: HEAD TRACK

The head track typically comes assembled as a single unit unless your system length is over 25 feet. In that case, the head track will typically be split into two pieces with guide pins for assembly prior to installation. The head track is pre-drilled and counter sunk for #10 flat head screws (not provided). An example of the head track system is shown below.



#### Installing the Head Track

Find the center width of your head track and mark a centerline on the track with pencil or a <u>non-permanent</u> marker. Center jamb-pocket units off of the pocket interlock location.



A story pole is labeled and included with your delivery. The story pole has been calculated to provide the correct clearance for the doors to move as well as assure that when the doors are in the locked position, the top gaskets seal against the guide. The system specific story pole height can be found on the corresponding system pages in the approved shop drawings.

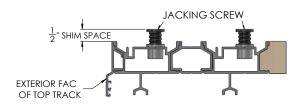
You will need to install some temporary blocks/supports near the header to support the head track while leveling and fastening it. Identify the story pole height and mark this dimension near the header. Install your temporary support blocks aligned below these marks.

You may need two or more people for this step. Raise the head track into position and support it on top of the blocks/supports that you installed. Be careful not to damage or scratch the track. Align the center line marks at the head track and header if applicable. Insure that the top guides of the head track are centered over the bottom track blades using a vertical laser at several locations. Any misalignment will create problems with the interlocks once the panels are installed.

Starting at one end and working your way to the other,

place the story pole plumb and directly on top of the bottom track blade. The story pole should sit snug (not tight) in between the top track guide and bottom track blade. Use the factory installed jacking screws to adjust the head track to the correct story pole height. You can do this by inserting a 6mm hex wrench into the fastening holes of the head track and turning either clockwise or counterclockwise. Confirm that the top track is at the correct story pole height; then, insert the approved fastener through the mounting holes into the header. Recheck with story pole.

If your shim space is larger than recommended and you are concerned about the length of the adjustment in the jacking screw, a pad of plywood can be installed between the rough opening and the top track. The maximum spacing that the jacking screw can accommodate is 1/2". Keeping the ½" jacking screw space is important for future adjustment of the door. Confirm that the jacking screws are seated correctly against the rough framing and they have enough length to be an effective shim. Be sure to secure the pads in place so that the mounting screw that goes through the top guide track does not hit any nails or screws holding the pad in place.



## 5: SIDE JAMBS

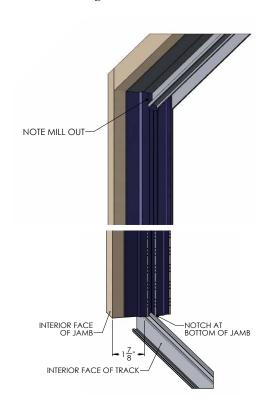
Side jambs come assembled as a single unit with built in jacking screws, wood interior fascia (if an aluminum wood system), and locking pins. An example of the side jamb is shown below.



#### Installing the Side Jamb

If your configuration has side jambs, place them into the opening in the correct location/position. Insert the top of the jamb in between the header and framing and then slide the bottom in above the bottom track making sure that the notch in the jamb aligns with the bottom track blade.

Using a 6mm hex wrench and the factory installed jacking screws, adjust the jambs plumb and square to the system. Then, insert the approved fastener through the mounting into the framing.



## 6: PANELS

Panels come assembled as a single unit with hardware and glass installed, unless it is requested without glass. Each panel comes protected with cardboard and plastic wrap.

#### **Installing the Panels**

From the shop drawing, determine the correct placement for panels (see panel #'s on drawings and panels). The panels are placed like a conventional sliding door system: the first panel installed would be the fixed or secondary panel to the exterior, and the last panel installed would be the primary panel to the interior.

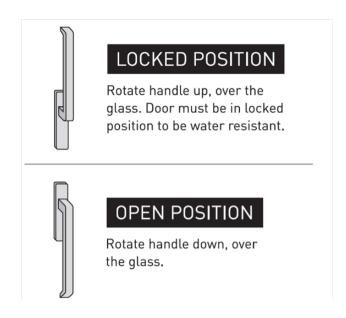
Using the provided permenant or construction handle, place the wheels in the retracted/up position before installing the panels. If the construction handle is not available, you can operate the gears using a 5-inch long extension on a ratchet (3/8" drive).

From the interior, slide the top of the panel over the center head track. Then set the bottom rollers on the track. Each panel should straddle the next panel in the proper sequence.

If your system has fixed panels, they will not have wheels; they will have PVC blocks in the standard wheel locations. The panel can be slid into place and locked against the jamb using the provided construction handle.

#### IMPORTANT:

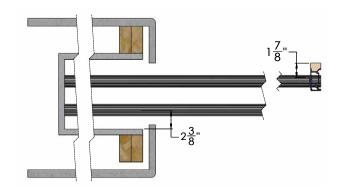
It is very important that the doors are never operated in the "down" or locked position. If the doors are operated in this position this may cause damage to the track drains or other system components. See figure below.



Operate the panels to ensure smooth movement.

#### Installing the Pocket Interlock

If you are installing a pocketing system, the next step is to install the pocket interlock. The pocket interlock creates the seal between the building and the panels to make the system weather resistant.

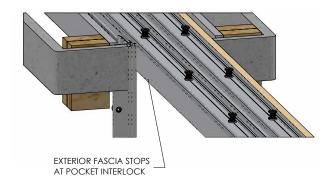


The figure above is for an all aluminum or aluminumwood system.

Remove or slide all the panels except the last panel out of the pocket that engages with the pocket interlock. Slide the last panel into the pocket. The panel will be required to adjust the pocket interlock. (You may need to remove the stop at the head track so that the panel will travel deeper into pocket to clear interlock).

Place the pocket interlock on the exterior wall. Plumb the interlock downward starting from head track fascia making sure you keep the required clearances. Adjust the jacking screws as needed.

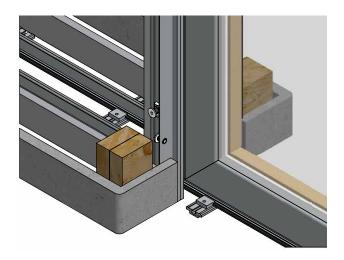
Loosely mount the pocket interlock to keep it in place when the panel is pulled out of the pocket. Slowly pull the panel from the pocket and check that the pocket interlock engages the face interlock on the panel. If there is any clicking or if the interlock does not engage, then the pocket interlock needs to be adjusted.



Adjust the pocket interlock and repeat the process until the interlocks engage smoothly and without any rubbing. After securing the pocket interlock, cut off the extra plastic jacking screw material that extends to the outside with a chisel.

#### Fine-Tuning the System

Double-check the track and jamb adjustments. Adjust any nuts on the bottom track or jacking screws on the sides or top. Be sure that the primary and fixed panels meet the jamb straight and parallel. If not, additional adjustment will need to be made to the jambs and track until they do. The panels should operate easily. The sound of brushes sealing against each other is normal, but there should be no metal-to-metal sound. Once the panels operate freely, remove them and carefully set them aside. Excessively high bolts on the bottom track should be cut off so that they do not stick up and interfere with the finished floor. If your particular system has a weep system, check it for proper drainage.



**NOTE:** Weiland achieved its water performance levels by connecting the drain tubes to a 1" PVC manifold with a 'flapper style' PVC check valve. The style of drainage you use is dependent on your site conditions. Proper slope must be maintained for any drain system. As a general rule connecting drain tubes together without increasing the drain diameter can impede flow; and a check valve will help reduce any water or air backflow.

## 7: FLOORING, SEALING, & CAULKING

#### **Before You Begin**

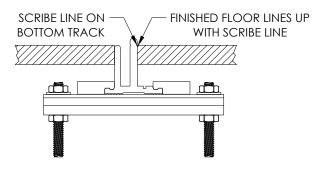
The Weiland Track System is designed to create a seamless

threshold. The track extends exactly 3/16" above the finished floor and includes a scribe line to guide the installer.

The finished floor is a critical part of the threshold and must be level/flush to the 3/16" scribe line on the track with no gaps or joints. If the finished floor is not level and flush to the scribe line it is a potential area for wind and water infiltration. The door panels rely on a straight and level floor for proper sealing when in the lowered position.

#### Finish Floor Material

The finish floor should be exterior rated, flat, smooth, level, non-porous, no bumps or rises, without exposed aggregate, non-shrinking, non-expanding, and provide and continuous level plane under the door panels.



#### **NOTES**

The exterior floor must be sloped away from the interior. A general guideline is 1/4" per foot starting at the exterior of each panel surface.

All transvers drain and drainage track tubing should be plumbed/connected to weep or drainage system prior to filling the depression.

After your track is installed, make a restricted zone around the track area to eliminate any movement or damage to the track while waiting for fill-in material.

NOTE: Be sure to protect the track in a way that keeps backfill material, glue, grout etc. out of the drainage track. Never allow a panel to roll over a taped off track or roll over glue, grout, and concrete that may be stuck on the track. This can 'gum up' or damage the wheels. The panels will need to be removed to clean the wheels and if necessary replaced.

You may wish to have the flooring contractor backfill the track depression. This determines what spacing he will need to give the finished flooring, and how to get the flooring to the correct height. Also, it enables him to determine what will be required to complete the installation of the flooring system.

Most customers use a grout or high strength concrete to fill the track slot. Be careful not to damage the track surface or drainage components.

Once the depression is filled to the correct level, install the finished floor material. It's critical for the flooring to be at 3/16" below the top of the track for the panels to sit and seal properly. A piece of wood with a straight edge and 3/16" notches make a good gauge to check the surfaces. The exterior surface should be sloped properly so that water can't build up at the base of the panels. Allow a minimum ½" per foot slope from the edge of each door away from the opening.

Once the flooring has been installed all tape, grout, concrete, and glue residues must be completely removed. The operation of the doors is directly related to the condition of the track.

#### System Sealing and Caulking

Re-install the panels to check for any clearance problems. The floor is the sealing surface for the panels, so it must be level.

#### **IMPORTANT:**

Fixed panels and jambs need to be caulked in place. Fixed panels have the same gasket system as the operable panels. Leaking will occur if the fixed panels are not properly locked to the side jamb and caulked. Weatherproofing the jambs and interlocks to the building should be addressed with your weatherproofing contractor and be consistent with your weather exposure levels.

After the finish floor is installed the bottom of the jambs should be sealed to the finish floor. The jambs on all wood systems have not been notched for the full height of the track, to allow spacing for caulking.

#### **Installation Completion**

Your Weiland Lift Slide system is now completely installed. All that's left is interior and exterior finish work to complete the opening.

The only adjustment in the entire system is at the jacking

screws in the head track and side jambs. The gears and wheels have no adjustment. The finish work that is near the opening needs to accommodate any adjustment that might be necessary in the future.

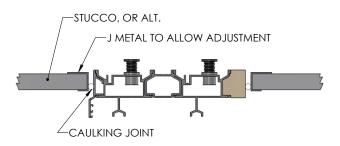
#### IMPORTANT:

The space between the rough opening header and the Weiland system head track should be filled with standard insulation or something that can be compressed.

#### IMPORTANT:

Do not use expanding foam, as it will not allow the head track to be adjusted.

"J" metal may be run between the finish work and the system. This will allow adjustments upward without doing any damage to the surrounding finish work. The "J" metal should be installed near the head track and side jambs but not in contact with them. There should be a caulking joint between the "J" metal and the head track and side jambs in order to allow adjustment.



## 8: SYSTEM CARE

#### **System protection**

Protect this system as you would any expensive items on the site. There are several sources of potential damage to the Weiland Liftslide system:

**Stucco** – etches the finish on the aluminum, stains the wood, clogs the drains and damages the rollers.

**Drywall** – stains the wood, clogs the drains and gums up the rollers.

Wheelbarrows – can bend the bottom track and scratch the jambs and doors when they rub the sides. If you must use this area, it's a great idea to build a bridge over the track to protect it. The surface finish of the track is the most critical component of the door system. The quality of the surface finish will determine how easily the panels will slide when finished.

**Duct Tape** – adhesives can chemically release finishes. Use 3M blue painters tape to protect your painted surfaces. Note that even #3M blue painter's tape should not remain on the surface for more than 7 days as noted on the package.

**Wood** – if left unsealed, could cause swelling, shrinking and finish distortions that could prevent proper operation of the door. All wood parts must be sealed immediately following delivery. See Buyer's Preparation and Care Obligations.

#### **Protect The Glass**

Don't cover glass with plastic tarps or anything that can blow in the wind. Plastic blowing in the wind can sand glass surfaces. Protect glass with brush-on glass protectant or panels of some type that will not touch the surface.

#### Cleaning

Rinse contaminants off the surface with fresh water. After the panels have dried, apply a high quality car wax to all non-wood surfaces to help maintain the appearance.

Gaskets and contact surfaces should be cleaned as needed. Use a damp cloth to remove dirt and dust. After gaskets and gasket sealing areas have dried, a coat of automotive UV protectant spray (such as Armor-All) will help the gasket maintain flexibility and reduce drag.

Wood should be maintained as directed by the finisher.

#### Routine Annual Maintenance

Proper maintenance includes, but is not limited to, lubricating locks and moving parts regularly, as well as keeping tracks and surfaces clean and waxed. In corrosive environments near the ocean or around swimming pools it might be necessary to frequently clean and lubricate the doors. Sand is particularly damaging to tracks and rollers on sliding doors if they are not maintained.

#### **Special Notes for Saltwater Environments**

Screen doors can act as a salt distillery, catching the moist air and condensing the salt out of it. The best way to protect doors and windows in this type of environment is to rinse them with fresh water as often as possible (daily if necessary) and to wax all surfaces (exterior wood or aluminum, locks, handles, etc.) with a good quality automobile wax every two to four weeks. Pay particularly close attention to small seams and corners where corrosion can start.

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